

REMARKS

Claims 1-5, 8-20, 22-28, 31-49, and 52-63 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over *Dias* (United States Patent 6,540,791) in view of *Nguyen* (United States Publication 2003/0037384). The Examiner alleges that while *Dias* does not teach the polycarboxylic acids of Formula (I) of the claimed invention, one skilled in the art at the time of filing would have been motivated to incorporate the sequestering agents of *Nguyen* in the compositions of *Dias*, and thus arrive at the claimed invention. Official Action, page 4. Applicants respectfully traverse this rejection.

*Dias* teaches an alkaline hair bleaching composition comprising an oxidizing agent, a buffering agent, a hair care ingredient, and a stabilizer which is preferably a heavy metal ion sequesterant. The disclosed sequesterants include phosphonates, nitriloacetates, organic phosphonates, and polyaminocarboxylic acids. See Col.8, ll. 29-54. As conceded by the Office, *Dias* does not teach the use of the polycarboxylic acids of Formula (I) of the claimed invention. Nor does *Dias* provide any motivation to include such acids in the disclosed hair bleaching compositions.

*Nguyen* teaches hair relaxing compositions containing a hydroxide component, an oxidizing agent, and one or more optional ingredients. The list of optional ingredients or additives includes over 10 different classes of ingredients, among these being sequestering agents. See paragraphs [0036], [0037], and [0038]. The vast majority of the sequestering and chelating agents disclosed in *Nguyen* (e.g., phosphonates, amino acids, crown ethers, and silicates) are structurally distinct from the polycarboxylic acid sequestering agents recited in the claimed invention. See paragraphs [0042] and [0043]. *Nguyen* does list lauroyl ethylene diamine triacetic acid as one such agent. See paragraph [0045]. According to the disclosure in

paragraph [0045], taken together with *Nguyen's* claim 35, it appears that *Nguyen* regards lauroyl ethylene diamine triacetic acid, EDTA, and diethylenetriamine-pentaacetic acid ("DETAPAC") as equivalents.

The present specification states that "EDTA and derivatives thereof [e.g., DETAPAC] have insufficient properties" to properly neutralize metal contaminants. Application, page 3, lines 28-33. The specification teaches that, surprisingly, certain polyacids act as "complexing agents of choice in oxidizing compositions for dyeing, bleaching, and permanently reshaping of keratin fibers." Application, page 4, lines 21-27. In direct contrast to the *Nguyen's* disclosure, Applicants have shown in working Example I, that polycarboxylic acids of Formula (I) are superior to sequestering agents such as DETAPAC or EDTA. Specifically, Example 1 compares the stability of a hair dyeing, bleaching or permanent reshaping composition comprising hydrogen peroxide and DETAPAC, with a composition comprising hydrogen peroxide and methylglycinediacetic acid ("MGDA") which is a polycarboxylic acid embodiment of the claimed invention. The results showed that the MGDA composition was more stable. Based on these results, one skilled in the art would expect that lauroyl ethylene diamine triacetic acid would also provide superior results when compared with DETAPAC. As such, Applicants submit that the claimed invention would not have been obvious over the collective teachings of the cited references.

Aside from the foregoing, Applicants submit that a person of ordinary skill in the art would not have been motivated to modify hair bleaching compositions in the manner suggested by the Official Action because sequestering agents function differently in hair relaxing compositions such as those disclosed in *Nguyen*. In *Nguyen's* compositions, the sequestering or chelating agents generate enough available hydroxide ions to

effect lanthionization of keratinous fibers, i.e. replacing disulfide bonds with lanthionine bonds so as to relax curly hair. *Nguyen*, paragraph [0038]. The claimed invention, on the other hand, is directed to providing enhanced dyeing, bleaching, or permanent reshaping of hair by removing trace metals with a complexing agent. Accordingly, one skilled in the art would not look to *Nguyen*, which is not concerned with dyeing, bleaching, or permanently reshaping of hair, to modify or in any way improve upon the bleaching compositions of *Dias*.

In view of the foregoing, reconsideration and withdrawal of the rejection are respectfully requested.

The Examiner has also rejected claims 29 and 50-51 under 35 U.S.C. § 103(a) as being unpatentable over *Dias* in view of *Nguyen* and further in view of *Di La Lettrie* (United States Patent 6,254,646). The Examiner alleges that one of ordinary skill in the art would have been motivated to utilize a reducing composition followed by a oxidizing composition for permanent reshaping as disclosed in *Di La Lettrie*. Applicants respectfully traverse this rejection because *Di La Lettrie* does not remedy the deficiencies of the collective teachings of *Dias* and *Nguyen*.

With regard to the method claims 50 and 51, none of the cited references teaches applying a reducing agent followed by application of a combination of a sequestering agent of Formula (I) and an oxidizing agent. While *Di La Lettrie* does disclose a method of applying a reducing composition prior to application of an oxidizing composition, such a method does not teach or suggest applying a polycarboxylic acid of Formula (I). Moreover, while *Nguyen* teaches the combination of an oxidizing agent with lauroyl ethylene diamine triacetic acid, such a disclosure does not teach or suggest such a combination is used to permanently reshape hair. As such, *prima facie* obviousness has not been established with respect to claims 50 and 51.

With regard to "kit" of claim 29, none of the cited references teaches devices containing a reducing agent and a combination of an oxidizing agent with a sequestering agent. In fact, none of the references teach "kits", nevertheless "kits" containing sequestering agents in combination with an oxidizing agent.

Reconsideration and withdrawal of the rejection are respectfully requested.

As it is believed that all of the rejections set forth in the Official Action have been fully met, favorable reconsideration and allowance are earnestly solicited.

If, however, for any reason the Examiner does not believe that such action can be taken at this time, it is respectfully requested that he/she telephone applicant's attorney at (908) 654-5000 in order to overcome any additional objections which he might have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge Deposit Account No. 12-1095 therefor.

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Respectfully submitted,

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